

In the claims:

Applicant hereby restates the claims of the present application as follows:

1 - 12. (Previously Canceled)

13. (Currently amended) A hydraulic transmission system for deriving power from at least one submerged water current driven turbine rotor, the transmission system comprising: a turbine rotor submerged in a body of water containing a current, the rotor having an output, a plurality of first pumps coupled to the output of the water current driven turbine rotor, the plurality of first pumps producing, in response to rotation of the turbine rotor by the water current, a pressurized supply of water at an outlet of the first pumps, a power generator and a hydraulic motor coupled to a drive shaft of the power generator, the hydraulic motor having an input, a fluid circuit including a first fluid coupling between the outlet of the plurality of first pumps and the input of the hydraulic motor for conveying water pressurized by the plurality of first pumps to the hydraulic motor and a second fluid coupling between an outlet of the hydraulic motor and an inlet to the plurality of first pumps for re-circulating water previously pumped from the plurality of first pumps to the hydraulic motor, the first pumps and hydraulic motor being sized such that at any given non-zero pressure in the fluid circuit coupling between the outlet of the plurality of first pumps and the input of the hydraulic motor, the speed of the hydraulic motor is greater than the first pumps, an intake coupled to the fluid-circuit for receiving water from any surrounding body of water in which the turbine rotor is submerged, a filter coupled to the intake for filtering any water received through the intake, a header tank coupled to the filter for storing water that has passed through the intake and the filter, and a third fluid coupling between an outlet of the header tank and an the inlet to the plurality of first pumps for supplying stored water to the plurality of first pumps to make up for water loss from the pressurized supply of water in the fluid circuit.

14. (Canceled)

15. (Currently amended) A hydraulic transmission system as claimed in claim 14 13 further comprising,

a pressure plenum coupling the plurality of first pumps to the ~~input of the hydraulic motor~~ first fluid coupling, and

a return plenum ~~coupled~~ coupling the plurality of first pumps to the ~~outlet of the hydraulic motor~~ third and second fluid couplings for distributing re-circulating water and stored water to the plurality of first pumps.

16. (Currently amended) A hydraulic transmission system as claimed in claim 15 further comprising

a pressure balancing tank coupled to the pressure plenum for absorbing vibrational energy of the turbine rotor output.

17. (Previously canceled)

18. (Currently amended) A marine turbine installation comprising

a support column fixed to a substrate lying below a body of water in which currents exist, a turbine coupled to the support column having a rotor positionable in the body of water for interaction with the water currents, the rotor having an output shaft, a plurality of first pumps coupled to the output shaft, the plurality of first pumps having at least one outlet, a hydraulic motor coupled to a drive shaft of an electrical generator, the hydraulic motor having an input, a fluid circuit including a first fluid coupling between the at least one outlet of the plurality of first pumps and said input of the hydraulic motor for conveying water pressurized by the plurality of first pumps to the hydraulic motor and a second fluid coupling between an outlet of the hydraulic motor and an inlet to the plurality of first pumps for re-circulating water previously pumped from the plurality of first pumps to the hydraulic motor, the first pumps and hydraulic motor being sized such that an any given non-zero pressure in the fluid circuit coupling between the outlet of the

plurality of first pumps and the input of the hydraulic motor, the speed of the drive shaft of the electrical generator is greater than the speed or the output shaft of the rotor, an intake coupled to the fluid circuit for receiving water from the body of water, a filter coupled to the intake for filtering any water received through the intake, a header tank coupled to the filter for storing water that has passed through the intake and the filter, and a third fluid coupling between an outlet of the header tank and an the inlet to the plurality of first pumps for supplying stored water to the plurality of first pumps to make up for water loss from the pressurized supply of water in the fluid circuit.

19. (Canceled)

20. (Currently amended) A marine turbine installation as claimed in claim 19 18 further comprising a pressure plenum coupling the plurality of first pumps to the input of the hydraulic motor first fluid coupling, and a return plenum coupled coupling the plurality of first pumps to the outlet of the hydraulic motor third and second fluid couplings for distributing re-circulating water and stored water to the plurality of first pumps.

21. (Currently amended) A marine turbine installation as claimed in claim 20 wherein at least one of the plurality of first pumps the first fluid coupling is coupled to a hydraulic motor coupled to a second turbine and a pressure balancing tank is coupled to the pressure plenum first fluid coupling so that differences in rotor speed between the turbines can be accommodated.

22. (Canceled)

23. (Previously presented) A hydraulic transmission system as claimed in claim 13 wherein the hydraulic motor consists essentially of a Pelton wheel.

24. (Previously presented) A marine turbine installation as claimed in claim 18 wherein the hydraulic motor consists essentially of a Pelton wheel.

25. (Currently amended) A marine turbine installation as claimed in claim ~~22~~ 21 wherein the hydraulic motor coupled to the second turbine consists essentially of a Pelton wheel.